PATENT CLAIMS

1. A heat resistant aluminium alloy for heat exchangers, characterized in that the aluminium alloy comprises the following proportions of alloy components in weight percent:

$0.3\ \% \leq Si \leq 1\ \%$,
$Fe \leq 0.5\ \%$,
$0.3\ \% \leq Cu \leq 0.7\ \%$,
$1.1\ \% \leq Mn \leq 1.8\ \%$,
$0.15\ \% \leq Mg \leq 0.6\ \%$,
$0.01\ \% \leq Cr \leq 0.3\ \%$,
$Zn \leq 0.10\ \%$,
$Ti \leq 0.3\ \%$,

unavoidable impurities separately representing a maximum of 0.1 %, together a maximum of 0.15 %, and the remainder being aluminium.

2. The aluminium alloy for heat exchangers according to claim 1, characterized in that the aluminium alloy comprises the following proportions of alloy components in weight percent:

$0.15\ \% \leq Mg \leq 0.3\ \%$
$Zn \leq 0.0\ 5\ \%$
$0.01\ \% \leq Ti \leq 0.3\ \%$.

3. The aluminium alloy according to one of claims 1 or 2, characterized in that the aluminium alloy

comprises the following proportions of the alloy components Si, Fe, Mn in weight percent:

$$0.5\ \% \leq Si \leq 0.8\ \%,$$
$$Fe \leq 0.35\ \%,$$
$$1.1\ \% \leq Mn \leq 1.5\ \%.$$

4. A method for producing an aluminium strip or aluminium sheet for heat exchangers from a heat resistant aluminium alloy according to one of claims 1 to 3, characterized in that a rolling ingot is cast in a continuous casting process, the rolling ingot is preheated at 400 to 500° C prior to hot rolling, the rolling ingot is rolled to a hot strip, with the hot strip temperature being 250 to 380° C and the hot strip thickness being 3 to 10 mm at the end of the hot rolling and the hot strip is cold rolled to final thickness.

5. The method for producing an aluminium strip or aluminium sheet for heat exchangers according to claim 4, characterized in that the rolling ingot is homogenized prior to the preheating.

6. The method for producing an aluminium strip or aluminium sheet for heat exchangers according to one of claims 4 or 5, characterized in that the hot strip is intermediately annealed at a temperature of 300 to 450° C.

7. The method for producing an aluminium strip or aluminium sheet for heat exchangers according to one

of claims 4 to 6, characterized in that, during the cold rolling, the aluminium strip is intermediately annealed at a temperature of 300 to 450° C prior to reaching the final thickness.

8. The method for producing an aluminium strip or aluminium sheet for heat exchangers according to one of claims 4 or 7, characterized in that subsequent to the cold rolling, a phase annealing step to the final state takes place at a temperature of 250 to 400° C.

9. The method for producing an aluminium strip or aluminium sheet for heat exchangers according to one of claims 4 or 8, characterized in that prior to the preheating, the rolling ingot is provided on one or two sides with plates made of another alloy.

10. The method for producing an aluminium strip or aluminium sheet for heat exchangers according to claim 9, characterized in that the plates are comprised of a solder alloy and as solder alloy there is used an aluminium solder, in particular an aluminium alloy comprising 6 to 13 weight percent Si, preferably an AlSi7.5 alloy or AlSi10 alloy.

11. The method for producing an aluminium strip or aluminium sheet for heat exchangers according to one of claims 4 or 10, characterized in that the hot strip is cold rolled to a final thickness of 0.1 to 2.0 mm.

12. Aluminium strip or aluminium sheet comprised of an

aluminium alloy according to one of claims 1 to 3 produced according to a method according to claim 4 to 11.

13. The aluminium strip or aluminium sheet according to claim 12, characterized in that the aluminium strip is a tube strip, a tube plate strip, a side part strip or a disk strip for producing a heat exchanger.

14. The aluminium strip or aluminium sheet according to claim 13, characterized in that the tube strip has a final thickness of 0.15 to 0.6 mm, preferably 0.15 to 0.4 mm, the tube plate strip a final thickness of 0.8 to 2.5 mm, preferably 0.8 to 1.5 mm or the side part strip a final thickness of 0.8 to 1.8 mm, preferably 0.8 to 1.2 mm or the disk strip a final thickness of 0.3 to 1.0 mm, preferably 0.3 to 0.5 mm.